

Remarks

This Amendment is responsive to the Office Action mailed December 29, 2004 which rejected claims 1-13 and 18-20. The Applicant has amended claims 1-4, 6-13, 18, and 20 solely to more particularly point out and distinctly claim the patentable subject matter of the embodiments of the present invention. The Applicant has also filed new claims 21-24 to replace withdrawn claims 14-17. These amendments and new claims are proper, do not include new matter, are not narrowing in view of a prior art rejection, do not require the Examiner to perform additional searching, and place all claims in condition for allowance.

Rejection Under 35 USC 112, Second Paragraph

Claim 8 was rejected for lacking an antecedent basis for the claim term "the cradle." The present amendments obviate this rejection. Reconsideration and withdrawal of this rejection of claim 8 are respectfully requested.

Claim 20 was rejected for indefiniteness in that it is unclear how the step of vibration damping writes data to the disc. The present amendments obviate this rejection. Reconsideration and withdrawal of this rejection of claim 20 are respectfully requested.

Rejection Under 35 USC 102(e)

Claims 1-8, 10-13, and 18-20 were rejected as being anticipated by U.S. Patent No. 4,690,388 issued to Harrison ("Harrison '388"). This rejection is respectfully traversed.

Claim 1

Harrison '388 cannot sustain the Section 102 rejection because it does not disclose all the features of amended claim 1, which recites at least the following:

a flexible diaphragm with a central membrane portion and an annular portion depending from the membrane, a distal end of the annular portion connected to a rigid base disposing the membrane substantially parallel to the base, the damping element and the base cooperatively defining a sealed chamber....

(excerpt of amended claim 1)

Support for the amendment to claim 1 is provided at least in FIGS. 3-5 and the description corresponding thereto. There it is noted that the diaphragm 104 defines three sides of the chamber 106, the base 134 defining the fourth side. By disposing the flexible, substantially planar central membrane portion of the diaphragm 104 substantially parallel to the base 134, and by not constraining the flexible upstanding annular portion of the diaphragm 104, the fluid isolator assembly 102 is adapted for damping relatively low frequency compressive and shear vibrations by displacement of the membrane relative to the base. By providing continuity of the diaphragm from the membrane to the base, relatively high frequency vibrations are damped by the taut surface of the diaphragm. (see, for example, description page 4 lines 3-11)

Harrison '388 contrarily discloses no central membrane portion whatsoever. Rather, Harrison '388 discloses opposing rigid plates 10, 11 to which distal ends of the diaphragm 12 are attached. Accordingly, Harrison '388 is inherently incapable of transferring high frequency vibrations, as in embodiments of the present invention, through the continuous taut surface of the diaphragm.

Harrison '388 also has constraining members depending from the rigid plate 10 that limit the horizontal movement of the diaphragm 12, making it inherently incapable of suppressing low frequency shear vibrations as in accordance with the embodiments of the present invention.

Harrison '388 is silent regarding a flexible diaphragm with a central planar membrane portion and an annular portion distally attached to a base to define the sealed chamber. Accordingly, amended claim 1 is allowable over the art of record which does not disclose or suggest all the features of the embodiments of the present invention as claimed. Reconsideration and withdrawal of the present rejection of claim 1 and the claims depending therefrom are respectfully requested.

Claim 10

Harrison '388 cannot sustain the Section 102 rejection because it does not disclose or suggest all the recited features of amended claim 10, which recites at least the following:

a floating body floatably interfaced relative to the flexible diaphragm for damping high frequency vibrations from a machine tool....

(excerpt of claim 10, emphasis added)

As discussed above, Harrison '388 is silent regarding a flexible diaphragm with a central planar membrane portion. The membrane portion of the diaphragm of the present invention is essential to damping the high frequency vibrations, such as are associated with the high speed motor 216 and the highly accelerated servo heads 212. As discussed above, these high frequency vibrations are damped by transmission through the continuous taut surface of the diaphragm.

Harrison '388 discloses a shock absorber for a vehicle suspension. A skilled artisan recognizes that as such Harrison '388 does not contemplate, and is inherently incapable of damping high frequency vibrations such as are associated with machine tools like the servo data writing assembly.

Accordingly, amended claim 10 is allowable over the art of record which does not disclose or suggest all the features of the embodiments of the present invention as claimed.

Reconsideration and withdrawal of the present rejection of claim 10 and the claims depending therefrom are respectfully requested.

Claim 18

Harrison '388 cannot sustain the Section 102 rejection because it does not disclose or suggest all the recited features of amended claim 18, which recites at least the following:

damping simultaneously both high frequency and low frequency vibration in a machine tool....
(excerpt of claim 10, emphasis added)

As discussed above, Harrison '388 is silent regarding a flexible diaphragm with a central planar membrane portion, which is essential in the embodiments of the present invention for damping high frequency vibrations through the taut surface of the diaphragm. Harrison '388 contrarily discloses a shock absorber for a vehicle suspension and thus neither contemplates, nor is capable of, damping high frequency vibrations such as are associated with machine tools like the servo data writing assembly.

Accordingly, amended claim 18 is allowable over the art of record which does not disclose or suggest all the features of the embodiments of the present invention as claimed. Reconsideration and withdrawal of the present rejection of claim 18 and the claims depending therefrom are respectfully requested.

New Claims

New claim 21 is allowable over the art of record which does not disclose or suggest the recited floating elastomeric member that is pressingly engageable against a flexible planar membrane of a diaphragm. New claims 22-24 are allowable as dependent claims of allowable independent claim 21.

Conclusion

This is a complete response to the Office Action mailed January 29, 2005. The Applicant respectfully requests that the Examiner enter the above amendments, reconsider the application and allow all of the pending claims. The Applicant has also submitted herewith a request for telephone interview to be held after such time the Examiner has fully considered this Amendment but before the next action on the merits if all claims are not allowed. The telephone interview is necessary to clarify the patentable distinction of the amended claims over the cited reference as well as all other art of record. The Examiner is invited to contact the below signed Attorney should any questions arise concerning this response.

Respectfully submitted,

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